

21 Talcott Notch Road, Suite 1, Farmington, Connecticut 06032 Phone: (860) 678-0005 • Fax: (860) 678-0006 www.theccic.org

Testimony for the Higher Education & Workforce Advancement Committee From Judith B. Greiman Connecticut Conference of Independent Colleges March 15, 2011

On behalf of the member institutions of the Connecticut Conference of Independent Colleges (CCIC), I am submitting testimony on S.B. 1091, An Act Concerning Connecticut's Manufacturing and Technology Workforce which requires that the Department of Higher Education study issues concerning Connecticut's manufacturing and technology workforce. The purpose of this testimony is to highlight the work that Connecticut's independent colleges are doing in this important sector of the state's economy.

Connecticut independent colleges and universities play a critical role in training our future workforce in manufacturing and technology. They award 70% of all degrees earned in this state in Engineering and Related Technologies and 80% of the degrees earned in Computer and Information Science (82%). An example of the academic programs includes Fairfield University's School of Engineering that offers five undergraduate degree tracks with over fifteen different areas of concentration including computer-aided manufacturing and machine design. The graduate school offers four Masters of Science degree tracks. In an effort to prepare students for the modern workforce, every graduate from the school of engineering (graduate and undergraduate) must complete a senior or capstone project which requires students to design, analyze, fabricate, demonstrate and prepare both written and oral presentations of their project. In addition, many engineering students at Fairfield serve in internship positions or participate in site visits with faculty to work hand-in-hand with organizations in the area and obtain on-the-job experience. The University of Hartford, University of Bridgeport, University of New Haven, Trinity College, and Yale University also have schools of engineering that offer several different degree programs and concentrations at the undergraduate and graduate levels in areas related to manufacturing and technology.

The independent colleges in Connecticut are not only helping to prepare our future workforce, they are also active in research and development on issues related to manufacturing and technology. Last February, the University of Hartford's College of Engineering, Technology and Architecture was awarded a \$2.4 million federal grant for research on small autonomous aerial vehicles, often referred to as UAVs, to help the U.S. Army develop the technologies needed to create a new generation of small systems that will have the ability to transform into autonomous (unmanned) vehicles during flight.

Research activities involving technology within Yale's Faculty of Arts and Sciences, the School of Engineering and Applied Science, and the Yale Medical School are extensive, involving hundreds of faculty, students, and postdoctoral researchers. In addition, Yale's Office of Cooperative Research helps to facilitate the incubation of local companies based on technology licensed from Yale. In the last ten years, OCR has helped Yale

Albertus Magnus College, Connecticut College, Fairfield University, Goodwin College,
Mitchell College, Quinnipiac University, Rensselaer at Hartford, Sacred Heart University, Saint Joseph College, St. Vincent's College,
Trinity College, University of Bridgeport, University of Hartford, University of New Haven, Wesleyan University, Yale University



21 Talcott Notch Road, Suite 1, Farmington, Connecticut 06032 Phone: (860) 678-0005 • Fax: (860) 678-0006 www.theccic.org

scientists to found more than 40 companies that have in turn attracted more than \$450 million in financing. In addition, the Yale Entrepreneurial Institute (YEI) is an innovative program that helps Yale undergraduate and graduate students execute business plans for new ventures. In the last three years, YEI has supported the formation and growth of over 40 student-founded ventures, which have raised over \$20 million of outside investment capital. Additionally, the University of Bridgeport runs Ctech IncUBator in collaboration with Connecticut Innovations, Inc. This technology business incubator was created to support the development of new technology businesses, create jobs and spur regional economic development.

We hope that the expertise of the faculty involved in these programs will be included in future studies and planning efforts around technology and advanced manufacturing in Connecticut.